INTEROPERABILITY

EBONE: A European Backbone Takes Shape

AMSTERDAM, NETHERLANDS—On Oct. 30, at the Tiger Room of the Amsterdam Zoo, history took place. A group of European networks, users and computer companies got together and decided that they would pool their resources and form a European backbone.

For years, Europe has been waiting for Godot. The European Commission, with its money, seemed a likely place to get a pan-European network. The European Commission spawned lots of projects, but its focus on X.25 and Open Systems Interconnection to the exclusion of other protocols paralyzed it.

The EBONE effort was led by Kees Neggers, an employee of Surfnet, the regional network for places like the Netherlands and Belgium. Kees worked with groups such as EUnet, which has commercial links to the United States, and Nordunet, which is the regional network for the Scandinavian countries.

What makes EBONE remarkable is the wide variety of organizations represented in this voluntary consortium. More than 35 groups were present at the Zoo, including the CERN physics laboratory in Geneva, several telecommunications authorities, universities, regional networks and even IBM.

Not all of these will necessarily participate. The key to EBONE is a very carefully worded memorandum of understanding—wording that was offensive to the least number of people.

Afraid of upsetting the PTTs? Make sure to call this a "value-added network." What about the ISO camp? Make it an "open, value-added network." The Transmission Control Protocol people? Make it an "open, multiprotocol, value-added network."

Eventually, the voluntary consortium will go away in favor of some professional group that will run a European backbone. Meanwhile, each of the participants agrees to contribute something.

For some groups, existing lines are reallocated so that all EBONE traffic can pass over them. Other organizations give people, routers or network management.

EBONE is a one-year voluntary effort. At the end of next year, all the resources go back to the original organizations. Maybe EBONE will be extended for 1993, but maybe a formal organization will be in place by then.

For 1992, at least, there will be a functioning backbone. Four points—one in the north, one in the south and two in central Europe—are the EBONE hubs.

Two links to the United States provide strong Internet connectivity. Tail circuits connect various regional systems. The remaining question is how many meeting participants can convince their management to let them sign up.

EBONE shows that users can control their networks. It is not necessary to wait for government to act. While not a permanent solution, it is certainly one model of starting infrastructure.

Ideally, of course, EBONE would have been started with the help of the European Commission. Like the U.S. National Science Foundation, it could have started the effort, then sought a way to make it self-sustaining. But when government becomes paralyzed, there is still the possibility for individuals to control their own destinies.

CARL MALAMUD, THE AUTHOR OF SIX BOOKS, HAS JUST HAD PUBLISHED 'STACKS: INTEROPERABILITY IN TODAY'S COMPUTER NETWORKS' (PRENTICE HALL, 1991). THE VIEWS EXPRESSED ARE HIS OWN.

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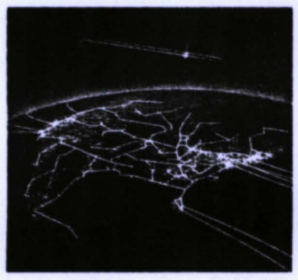

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